



# **Features**

# Sounds that you'll enjoy playing!

- The total of 144 sounds covers all the bases, including not only synthesizer sounds but also piano, organ, strings, brass, and guitar, all immediately playable for instant enjoyment.
- There are also six highly expressive "Special Tones" as well.

These six high-quality sounds were created specifically for the Lucina AX-09 (synth lead, poly synth, synth bass, jazz scat, violin and trombone).



# Easy to use and handle!

- Operation is easy simply turn on the power and choose a sound.
- With a lightweight, stylish body, and support for battery operation, you can play the Lucina AX-09 anywhere, anytime. Since you can sling the Lucina AX-09 over your shoulder when playing it, your performances can be more active and versatile.



# Enjoy performing more than ever!

- All of the unique expressive capabilities of a traditional synthesizer are at your fingertips, thanks to the Lucina AX-09's D Beam controller, modulation bar, and touch controller.
- You can easily play along with your favorite songs, either by connecting your portable audio
  player to the EXT IN jack, or by using the USB memory audio playback function.



# How Letters are Shown on the Lucina AX-09

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z R b C d E F G h , d Z L П n o P 9 r 5 t U u B X Y Z

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Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" (p. 24) and "IMPORTANT NOTES" (p. 25). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's Manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

# Englisl

Deutsch

Français

Italiano

Español

# Contents

Features2
How Letters are Shown on the Lucina AX-09 2
Panel Descriptions4
Front Panel
Bottom Panel5
Rear Panel
About Batteries6
Installing Batteries 6
Checking the Remaining Battery Power 6
Removing Batteries
Getting Ready
Connecting the AC Adaptor 7
Attaching the Strap
Connecting Your Speakers
Connecting Your Headphones
Turning the Power On
Selecting Tones9
Selecting a Regular Tone9
Selecting a Special Tone
Previewing Tones9
Registering Frequently Used Tones in Memory (FAVORITE)
Using the Performance Functions11
Raising or Lowering the Key Range by Octaves 11
Raising or Lowering the Key Range by Semitones 11
Using the Touch Controller11
Setting the Pitch Range of the Touch
Controller11
Using the Modulation Bar11
Assigning the Modulation Bar's Effect 12
Using the D Beam Controller12
Changing the ASSIGNABLE Setting 12
Using a Foot Pedal13
Preventing Tones from Changing During Performance (Lock function)
Playing Along with a Portable Audio Player 14
Playing Along with an Audio File from USB Memory . <b>14</b>
Making Audio Player Settings15
Editing the Tone Settings
Editing the Tone Parameters

Adjusting the Tuning17
Master Tune
Key Scale Tune
Adjusting the Keyboard's Touch Sensitivity.17
Setting a Fixed Value for the Keyboard's Velocity 17
Count In / Metronome18
Count In Settings
Various Settings (Utility)18
Checking the Lucina AX-09's Version
USB Driver Settings
Backing Up Lucina AX-09 Settings to USB Memory 19
Restoring Lucina AX-09 Settings from USB Memory . 19
Restoring the Factory Settings (Factory Reset) 19
Connecting Other Equipment20
Controlling MIDI Devices
MIDI Messages that can be Transmitted and Received20
Connecting a MIDI Sound Module 20
Making MIDI-related Settings20
Connecting to Your Computer via USB21
Controlling Video (V-LINK)21
Troubleshooting22
Specifications23
Error Message List23
USING THE UNIT SAFELY24
IMPORTANT NOTES25
Index26
MIDI Implementation Chart26

# **Panel Descriptions**

# **Front Panel**



## 1. OCTAVE [+] / [-] Buttons

These buttons raise or lower the keyboard range in steps of one octave (p. 11).

## 2. [TRANSPOSE] Button

By holding down this button and pressing the OCTAVE [+], [-] buttons you can raise or lower the keyboard range in steps of one semitone (p. 11).

## 3. Display

This shows the selected tone or mode, or the value of the parameter you're editing.

### 4. [SHIFT] Button

Use this button in conjunction with other buttons to execute various functions.

### 5. [SPECIAL TONE] Button

Press this to select special tones.

### 6. TONE [1]—[6] Buttons

Use these buttons to select the tone group for regular tones, or to select special tones.

### 7. [INC/+1/[DEC/-] Buttons

Use these buttons to select variations of the regular tones.

## 8. FAVORITE [A] / [B] Buttons

Use these buttons to select the FAVORITE memory bank (p. 10) in which you want to register a favorite tone.

### 9. [WRITE] Button

This button stores the Lucina AX-09 settings you've edited, or the tone you registered in FAVORITE (p. 10, p. 18).

### 10. [LOCK] Button

If this button is turned on, you won't be able to switch tones. Use this to prevent the tone from being accidentally switched during a performance (p. 14).

### 11. USB MEMORY Slot

You can insert USB memory (sold separately) here (p. 15).

### 12. [VOLUME] Knob

This knob adjusts the volume.

### 13. D Beam

### [PITCH] / [FILTER] / [ASSIGNABLE] Buttons

These buttons turn the D Beam on/off.

By placing your hand above the D Beam you can apply various effects to the sound (p. 12).

### 14. [V-LINK] Button

This button turns V-LINK on/off (p. 21).

### 15. [AUDIO PLAYER] Button

If you turn this on, you'll be able to play back audio files from USB memory (p. 14).

### 16. [►/II/ PREVIEW] Button

When the [AUDIO PLAYER] button is lit, this button starts/ stops playback of audio files in USB memory.

When the [AUDIO PLAYER] button is unlit, this button starts/stops a preview demo of the currently selected tone.

You can also get a count in to begin sounding by pressing the modulation bar while you press the [PREVIEW] button.

### 17. MODULATION BAR / TOUCH CONTROLLER

By pressing the modulation bar, you can apply vibrato. You can also switch to a Hold effect that sustains the sound you're playing (p. 11).

If you hold your finger on the touch controller and move it to left or right, the pitch will change (p. 11).

### 18. Strap Pin

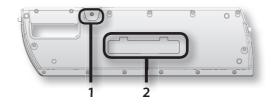
Attach the included strap to this pin (p. 7).

## 19. Strap Pin (A)

Attach the included strap to this pin.

Depending on your playing style, you can use either this pin or the strap pin (B) located on the rear of the Lucina AX-09 (p. 7).

# **Bottom Panel**



## 1. Strap Pin (B)

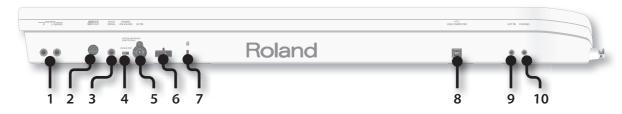
Attach the included strap to this pin.

Depending on your playing style, you can use either this pin or the strap pin (A) located on the side of the Lucina AX-09 (p. 7).

## 2. Battery Compartment

You can install Ni-MH AA rechargeable batteries here (p. 6).

# **Rear Panel**



## 1. OUTPUT Jacks (L/MONO, R)

The sound of the Lucina AX-09 is output from these jacks. Connect them to your amplified speakers.

To employ monaural output, connect to only the L/MONO jack.

### 2. MIDI OUT Connector

If you connect this to another MIDI device, MIDI messages from the Lucina AX-09 will be transmitted to that device, allowing you to play it remotely (p. 20).

### FOOT PEDAL Jack

Connect a separately sold Roland DP-series pedal here.

Alternatively, you can connect an expression pedal (EV-5; sold separately) (p. 13).

## 4. [POWER] Switch

This turns the power on/off (p. 8).

If you're using the included AC adaptor and need to turn off the power completely, turn off this POWER switch, and then disconnect the AC adaptor from the outlet.

### 5. DC IN Jack

Connect the included AC adaptor here (p. 7).

#### 6. Cord Hook

Use this to secure the cord of the included AC adaptor (p. 7).

### 7. Security Slot (配)

http://www.kensington.com/

### 8. USB COMPUTER Connector

Use a USB cable to connect the Lucina AX-09 to your computer (p. 21).

### 9. EXT IN Jack

Connect your portable audio player or other audio source here. The sound that's input via this jack will be output from the OUTPUT jacks and the PHONES jack (p. 14).

### 10. PHONES Jack

Headphones (sold separately) with a stereo mini plug (1/8'' jack) can be connected here (p. 8).

# **About Batteries**

If you're operating the Lucina AX-09 on batteries, you'll need eight Ni-MH AA rechargeable batteries. The battery life will differ depending on the conditions of use, but for continuous usage, it is approximately 4 hours.

## About rechargeable batteries

When using rechargeable batteries, the battery lifespan will normally become shorter with each recharge cycle. If the batteries run down soon after being recharged, it's time to replace them.

# **Installing Batteries**

- 1. Switch off the Lucina AX-09's power (p. 8).
- Remove the cover of the battery compartment located on the Lucina AX-09's bottom panel.

While pressing the tabs of the cover, lift the cover up and remove it.



3. Insert the batteries into the battery compartment.

Make sure to observe the correct polarity (+/- orientation) for each battery when inserting it.



- 4. Replace the battery compartment cover.
  - \* When turning the unit upside-down, get a bunch of newspapers or magazines, and place them under the four corners or at both ends to prevent damage to the buttons and controls. Also, you should try to orient the unit so no buttons or controls get damaged.
  - \* When turning the unit upside-down, handle with care to avoid dropping it, or allowing it to fall or tip over.

# Checking the Remaining Battery Power

When the remaining battery power runs low, three dots will blink in the display. If this indication appears, replace the batteries as soon as possible.



A while after this indication, the display will indicate "L  $\square$ ," and it will no longer be possible to operate the Lucina AX-09.

You can also check the remaining battery power in the following way.

 Hold down the [SHIFT] button and press the [LOCK] button.

The display will indicate the remaining battery power as a percentage ("0"-"100").

### MEMO

- The remaining battery power indication is an approximation.
- If you check the remaining battery power when the AC adaptor is connected, the display will always indicate "100."

# **Removing Batteries**

To remove the batteries, power off the Lucina AX-09, open the battery compartment cover, and remove the batteries.

# Note the following when using batteries

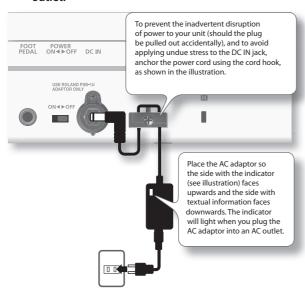
- Do not use alkaline batteries or zinc-carbon batteries
- The Lucina AX-09 will not operate on batteries if the AC adaptor is connected.
- If batteries are installed, disconnecting or reconnecting the power cord at the AC outlet or disconnecting the DC plug from the Lucina AX-09's rear panel while the power is on will cause the power to turn off. You must turn off the power before you connect or disconnect the power cord or AC adaptor.
- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit.
- If used improperly, batteries may explode or leak and cause damage or injury. In the interest of safety, please read and observe the following precautions.
  - Carefully follow the installation instructions for batteries, and make sure you observe the correct polarity.
  - · Avoid using new batteries together with used ones. In addition, avoid mixing different types of batteries.
  - Remove the batteries whenever the unit is to remain unused for an extended period of time.
  - If a battery has leaked, use a soft piece of cloth or paper towel to wipe all remnants of the discharge from the battery compartment. Then install new batteries. To avoid inflammation of the skin, make sure that none of the battery discharge gets onto your hands or skin. Exercise the utmost caution so that none of the discharge gets near your eyes. Immediately rinse the affected area with running water if any of the discharge has entered the eyes.
  - · Never keep batteries together with metallic objects such as ballpoint pens, necklaces, hairpins, etc.

# **Getting Ready**

# **Connecting the AC Adaptor**

The Lucina AX-09 can operate using the included AC adaptor, or using Ni-MH AA rechargeable batteries.

- Make sure that the Lucina AX-09's power is turned off (the [POWER] switch is in the OFF position).
- Turn the [VOLUME] knob all the way to the left (minimum).
- Connect the AC adaptor to the Lucina AX-09's rear panel DC IN jack, and then plug it into an AC outlet.



# **Attaching the Strap**

Attach the strap to the Lucina AX-09 as shown in the illustrations below.

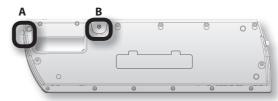


 Attach one end of the included strap to the strap pin shown in the illustration below.



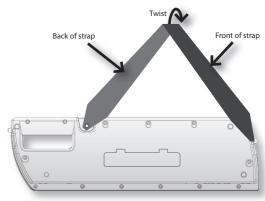
Attach the other end of the included strap to one of the other two strap pins.

A strap pin is provided in two locations; "A" and "B." You can use either one, whichever is more comfortable for you. For a larger-bodied person, attaching the strap to pin "A" will provide better stability.



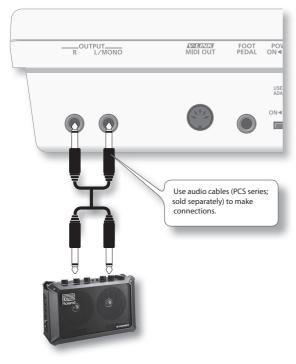
### NOTE

If you use strap pin "B," twist the strap as shown below. If you attach the strap without twisting it, the strap may come off of the Lucina AX-09.



# **Connecting Your Speakers**

The Lucina AX-09 does not contain an amp or speakers. In order to produce sound, you'll need to connect the rear panel OUTPUT jacks to an audio device such as an amplified speaker system (subsequently referred to as "speakers"), or use headphones.



If you're outputting in monaural, connect only the L/MONO jack.

\* To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.

# **Connecting Your Headphones**

Connect headphones to the rear panel PHONES jack.

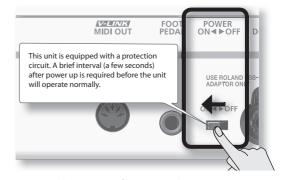


# **Turning the Power On**

- \* Once the connections have been completed (p. 8), turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.
- Minimize the volume of the Lucina AX-09 and your speakers.



On the Lucina AX-09's rear panel, turn the [POWER] switch ON.



- 3. Turn on the power of your speakers.
- Use the [VOLUME] knob to adjust the volume appropriately.



# Turning the Power Off

- Minimize the volume of the Lucina AX-09 and your speakers.
- 2. Turn off the power of your speakers.
- 3. Turn the Lucina AX-09's [POWER] switch OFF.

# **Selecting Tones**

On the Lucina AX-09, each of the sounds you play is called a "tone." There are two types of tones: "regular tones" and "special tones."

# **Selecting a Regular Tone**

The Lucina AX-09 contains 144 regular tones that bring you the best sounds of Roland's synthesizers.

The regular tones are organized into six tone groups, with 24 tones in each group.

- If the [SPECIAL TONE] button or FAVORITE [A] / [B] button is lit, press the lit button to turn off its illumination.
- Press one of the TONE [1]–[6] buttons to select a tone group.

The button will light, and that tone group will be selected.

The name of the tone group is printed in black below each tone button.



#### MEMO

When you turn on the power, TONE [1] number 1 will always be selected.

Use the [INC/+] / [DEC/-] buttons to select a tone within the group.



Each group contains tones 1-24, and the number of the selected tone (1-24) is shown in the display.

Press the [INC/+] button to select the next tone, or press the [DEC/–] button to select the preceding tone.

#### MEMO

- For a list of the tones, refer to the "Tone List" at the end of this manual.
- As indicated by the black characters printed below the TONE buttons, each tone group is subdivided into two categories. (For example, the TONE [1] button group contains the two categories "SYNTH" and "PAD.")

Each time you hold down the TONE button of the currently selected (lit) tone group and press the [INC/+] / [DEC/-] button, the first tone of that category will be selected.

 By holding down the [INC/+] / [DEC/-] button, you can select tones rapidly. To select tones even more rapidly, hold down one button and then press the other button as well.

# Selecting the Rhythm Tone

No. 23–24 of the GUITAR/BASS group is the rhythm tone. For details, refer to the "Tone List" at the end of this manual

# **Selecting a Special Tone**

The Lucina AX-09 contains six "special tones" that were created specifically for it.

Press the [SPECIAL TONE] button so it's lit.



Press one of the TONE [1]-[6] buttons to select the desired special tone.

The names of the special tones are printed in blue characters below each tone button.



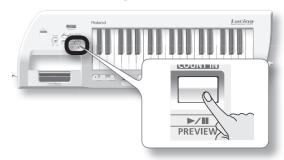
#### MEMO

To return to the regular tones, press the [SPECIAL TONE] button to turn it off.

# **Previewing Tones**

With the [AUDIO PLAYER] button off, press the [PREVIEW] button; the button will light and the currently selected tone will be played using a demo phrase that's suitable for that tone.

To stop the phrase before it has finished playing, press the [PREVIEW] button once again to turn off its illumination.



# Registering Frequently Used Tones in Memory (FAVORITE)

The Lucina AX-09 provides "FAVORITE memory locations" that allow you to register twelve of the tones. If you use this to register the tones that you use frequently, you'll be able to select those tones quickly and easily at any time.

Your settings for volume and reverb can also be registered along with the tone selections in the FAVORITE memory locations (p. 16).

#### MEMO

Only regular tones can be registered in FAVORITE memory.

# Registering a tone as a FAVORITE

FAVORITE memory contains two banks, A and B; you can register six tones in each bank.

- Select the tone that you want to register in a FAVORITE memory location.
- 2. Press the [WRITE] button to make it light.



Press the FAVORITE [A] / [B] button to select the bank in which you want to register the favorite.



The FAVORITE button you pressed will light.

The display will indicate " $\Pi$  - "(bank "A") or "b - "(bank "B").

 Press one of the TONE [1]-[6] buttons to select the memory location in which you want to register the favorite tone.



The button you pressed will light, and the tone will be registered in that FAVORITE memory location. The [WRITE] button will go out.

### MEMO

To return to regular tones, press the lit FAVORITE [A] / [B] button to turn off its illumination.

# Recalling a FAVORITE tone

Here's how to recall a tone you've registered in FAVORITE memory.

 Press the FAVORITE [A] / [B] button to select the bank in which you registered the tone you want to recall.



The FAVORITE button you pressed will light.

Press one of the TONE [1]-[6] buttons to select a FAVORITE memory location from the current bank.



You can also use the [INC/+] / [DEC/–] buttons to consecutively select FAVORITE memory locations in the same bank.

### MEMO

To return to regular tones, press the lit FAVORITE [A] / [B] button to turn off its illumination.

# Using the Performance Functions

The Lucina AX-09 provides various performance functions that can make your performance more expressive.

# Raising or Lowering the Key Range by Octaves

You can raise or lower the range of the keyboard in steps of one octave, for a maximum of three octaves upward or downward.

Value -3-3

Press an OCTAVE [+] / [–] button.



The display will indicate a value.

The OCTAVE [+] button will light if the octave setting is in the "+" direction; the OCTAVE [-] button will light if the octave setting is in the "-" direction.

#### MEMO

To return the octave setting to "0," press the OCTAVE [+] and [–] buttons simultaneously.

The OCTAVE [+] / [–] button will go out, and the keyboard will return to its normal range of pitches.

# Raising or Lowering the Key Range by Semitones

You can raise or lower the range of the keyboard in steps of a semitone.

This function can be convenient when you need to play a song in an unfamiliar key signature.

Value -5-6

1. Hold down the [TRANSPOSE] button.

The current setting will blink in the display.



 Hold down the [TRANSPOSE] button, and press the OCTAVE [+] / [-] button to set the desired value.



The value will be applied when you release the [TRANSPOSE] button.

The [TRANSPOSE] button will be lit if you've specified a value other than "0."

### MEMO

To return the setting to "0," hold down the [TRANSPOSE] button and press the OCTAVE [+] and [-] buttons simultaneously.

The [TRANSPOSE] button will go out, and the keyboard will return to its normal range of pitches.

# **Using the Touch Controller**

By placing your finger on the touch controller and moving it to left or right, you can vary the pitch of the sound you're playing. Touching the left side of the controller will lower the pitch, and touching the right side will raise the pitch.



# Setting the Pitch Range of the Touch Controller

By following the procedure below, you can set the range of pitches within which the pitch can be changed when you operate the Touch Controller. This setting is specified in terms of a value in semitones. For example, if you specify a value of "12," the pitch will rise by a whole octave when you touch the rightmost edge of the Touch Controller (12 semitones is equivalent to one octave).

 While holding down [SHIFT], touch the Touch Controller.

The value currently set for the pitch range will appear, blinking, in the display.

 Continue holding down the [SHIFT] button, and use the [INC/+] / [DEC/-] buttons to change the setting.

Value 0-24

- 3. Release the [SHIFT] button.
- **4.** To save this setting, hold down the [SHIFT] button and press the [WRITE] button.

# **Using the Modulation Bar**

You can apply vibrato by pressing the modulation bar while you play the Lucina AX-09.

### MEMO

The same effect is applied to all tones. However, if you've selected 4 VIOLIN or 5 TROMBONE of the special tones, the dynamics (expression) will change in a way that's distinctive of that instrument, allowing you to play with highly realistic expressiveness.



# Assigning the Modulation Bar's Effect

You can also change the assignment of the modulation bar so that it will hold notes or hold notes while applying vibrato.

 Hold down the [SHIFT] button and press the modulation bar.

The current setting will blink in the display.

 Continue to hold down the [SHIFT] button, and use the [INC/+] / [DEC/-] buttons to assign the desired effect.

This specifies the effect that will be applied when you operate the modulation bar.

Value	Explanation	
Поб	Vibrato will be applied to the sounds you're playing.	
hLd	The sounds you're playing will be sustained while you press the modulation bar.	
ЕПЬ	Vibrato and Hold will both be applied to the sounds you're playing.	

### MEMO

The same effect is applied to all tones. However, if you've selected 4 VIOLIN or 5 TROMBONE of the special tones, the dynamics (expression) of the instrument will be modified instead of the vibrato effect.

- 3. Release the [SHIFT] button.
- **4.** To save this setting, hold down the [SHIFT] button and press the [WRITE] button.

# **Using the D Beam Controller**

By moving your hand above the D Beam controller's sensor, you can modify the sound by applying the effect you've assigned to the D Beam.

## The D Beam controller's effective range

The illustration below shows the approximate effective range of the D Beam controller.

No effect will be obtained if you position your hand outside this effective range.



\* The usable range of D Beam controller will become extremely small when used under strong direct sunlight. Please be aware of this when using the D Beam controller outside.  Press one of the following buttons to select the function that you want to control using the D Beam controller.



Value	Explanation	
PITCH	Moving your hand above the D Beam controller will vary the pitch of the sounds you play.	
FILTER	Moving your hand above the D Beam controller will vary the tonal character of the sounds you play.	
	<ul> <li>For some tones, the change in character may be difficult to notice.</li> </ul>	
ASSIGNABLE	The D Beam controller will transmit the assigned function or control change message.	

While you play the keyboard, move your hand slowly up and down above the D Beam controller.

The button you pressed in step 1 will blink.

3. To turn off the D Beam controller, once again press the button you pressed in step 1; it will go out.

# Changing the ASSIGNABLE Setting

You can assign a MIDI control change number (CC) or function to the [ASSIGNABLE] button, and use the D Beam controller to control that parameter in real time.

 Hold down the [SHIFT] button and press [ASSIGNABLE].

The currently assigned function will blink in the display.



 Continue to hold down the [SHIFT] button, and use the [INC/+] / [DEC/-] button to specify the desired function or parameter that will be controlled by the D Beam controller.

Display	Value	Explanation
CO 1	CC01 (MODULATION)	Apply vibrato.
C 0 5	CC05 (PORTA TIME)	Control the portamento time over which the pitch changes between notes when playing with portamento.
C07	CC07 (VOLUME)	Control the volume.
C 10	CC10 (PAN)	Control the panning.
[11	CC11 (EXPRESSION)	Control the expression.
<u> </u>	CC64 (HOLD)	Sustain the notes.
C 6 5	CC65 (PORTAMENTO)	Smoothly connect the pitch from one note to the next.

Display	Value	Explanation
C 5 5	CC66 (SOSTENUTO)	Sustain the notes that are currently being held down.
[7]	CC71 (RESONANCE)	Control the resonance. Increasing the resonance value will produce a distinctive tonal character that is typical of a synthesizer.
E 72	CC72 (RELEASE TIME)	Control the time from note-off (when the key is released) until the sound is no longer heard (i.e., the release time).
E73	CC73 (ATTACKTIME)	Control the sharpness (attack speed) with which the sound begins.
E 74	CC74 (CUTOFF)	Control the cutoff. Higher values will make the sound harder (brighter); lower values will make the sound softer (more mellow).
RFŁ	AFTERTOUCH (Default)	Apply the most suitable effect for each of the Lucina AX-09's tones.
		By fingering a chord and moving your hand above the D Beam controller, you can produce an arpeggio of that chord.
ЯдЬ	5 ADLIB	The distance from the D Beam controller will determine the octave span of the chord that is played, and the speed at which you move your hand up and down will determine the speed at which the chord is arpeggiated.
		For example if you use your right hand to hold down the four notes "C D E G" and move your left hand above the D Beam controller, a phrase such as "C D E G C D E G C." will play.
SLo	SOLO SYNTH	The Lucina AX-09 will operate as a monophonic synthesizer whose pitch can be controlled by moving your hand above the D Beam controller.

### MEMO

By holding down the [INC/+] / [DEC/-] button you can choose this setting rapidly. To choose even faster, hold down the button and press the other button as well.

- Release the [SHIFT] button. 3.
- 4. To save this setting, hold down the [SHIFT] button and press the [WRITE] button.

# **Using a Foot Pedal**

If you connect a pedal switch (DP series; sold separately) to the FOOT PEDAL jack, you can hold down the pedal to make notes continue sustaining even after you release the keyboard.

Alternatively, you can use the pedal to apply numerous other effects.

# Connecting a foot pedal



### MEMO

Alternatively, you can connect an expression pedal (EV-5) instead of a pedal switch (DP series).

#### NOTE

Use only the specified expression pedal (EV-5; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the

# Specifying the foot pedal assignment

Hold down the [SHIFT] button and press the [V-LINK] button twice; the screen will indicate "Pal," allowing you to assign the effect applied by the foot pedal.

You can assign the following functions to the pedal.

To save this setting, hold down the [SHIFT] button and press the [WRITE] button.

Display	Value	Explanation
[0]	CC01 (MODULATION)	Apply vibrato.
C 0 5	CC05 (PORTA TIME)	Control the portamento time over which the pitch changes between notes when playing with portamento.
07	CC07 (VOLUME)	Control the volume.
C 10	CC10 (PAN)	Control the panning.
[11	CC11 (EXPRESSION)	Control the expression.
<u> 554</u>	CC64 (HOLD)	Sustain the notes.
C 6 5	CC65 (PORTAMENTO)	Smoothly connect the pitch from one note to the next.
C 5 5	CC66 (SOSTENUTO)	Sustain the notes that are currently being held down.

Display	Value	Explanation
[7]	CC71 (RESONANCE)	Control the resonance. Increasing the resonance value will produce a distinctive tonal character that is typical of a synthesizer.
E72	CC72 (RELEASE TIME)	Control the time from note-off (when the key is released) until the sound is no longer heard (i.e., the release time).
E73	CC73 (ATTACK TIME)	Control the sharpness (attack speed) with which the sound begins.
[74	CC74 (CUTOFF)	Control the cutoff. Higher values will make the sound harder (brighter); lower values will make the sound softer (more mellow).
RFŁ	AFTERTOUCH	Apply the most suitable effect for each of the Lucina AX-09's tones.
РЦР	PEDAL UP	Select the tone of the next tone number.
Pdn	PEDAL DOWN	Select the tone of the preceding tone number.

### MEMO

With the factory settings, the foot pedal is assigned to EBH (Hold).

# If using a foot pedal not made by Roland

If you're using a foot pedal that was made by a manufacturer other than Roland, the pedal polarity might be reversed, so that the operations that occur when you press and release the pedal are the opposite of what you expect. If so, hold down the [SHIFT] button and press the [V-LINK] button three times to make the display indicate "Pat." Then use the [INC/+] / [DEC/-] buttons to make the display indicate "F Eu."

To save this setting, hold down the [SHIFT] button and press the [WRITE] button.

Value	Explanation
5년년 (Standard)	Pedals made by Roland
r E⊔ (Reverse)	Pedals with a polarity opposite to that of Roland pedals

# Preventing Tones from Changing During Performance (Lock function)

You can lock the tone selected on the Lucina AX-09 to prevent a different sound from being selected even if you accidentally press a tone button while performing.

Hold down the [LOCK] button until it lights.



The Lock function will turn on; in this state, button operations will not switch the tone.

To re-enable tone switching, hold down the button once again until [LOCK] button goes out.

# Playing Along with a Portable Audio Player

You can connect your portable audio player, and play the Lucina AX-09 along with your favorite songs.

 Connect your portable audio player to the Lucina AX-09's EXT IN jack.



Play back a song on your portable audio player, and play along on the Lucina AX-09.

Use the controls of your player to adjust the volume and select songs.

\* When connection cables with resistors are used, the volume level of equipment connected to the inputs (EXT IN) may be low. If this happens, use connection cables that do not contain resistors.

# Playing Along with an Audio File from USB Memory

The Lucina AX-09 can play back audio files (MP3, WAV, AIFF) that you've copied to USB memory from your computer, allowing you to play along with your favorite songs.



# Copying audio files from your computer to USB memory

You'll need to copy the audio files from your computer to the root level of your USB memory.



## Audio files that can be played

MP3		
Format	MPEG-1 audio layer 3	
Sampling Frequency	44.1 kHz	
Bit Rate	32/40/48/56/64/80/96/112/128/160/192/224/256/320 kbps, VBR (Variable Bit Rate)	
WAV, AIFF		
Sampling Frequency	44.1 kHz	
Bit Rate	8/16/24 -bit	

# Insert the USB memory

 Insert your USB memory into the USB MEMORY slot as shown in the illustration below.



### NOTE

- Never insert or remove a USB memory while this unit's power is on. Doing so may corrupt the unit's data or the data on the USB memory.
- Carefully insert the USB memory all the way in—until it is firmly in place.
- Use USB memory sold by Roland. We cannot guarantee operation if other products are used.

# Play back audio files

- Insert the USB memory containing the copied audio files into the Lucina AX-09's USB MEMORY slot.
- 2. Press the [AUDIO PLAYER] button.

If you press the [AUDIO PLAYER] button once again, the button will go out; now audio files will not be played.

#### MEMO

The [►/II] button will not blink if USB memory is not inserted, or if the USB memory contains no song that can be played.

### 3. Select a song.

When you hold down the [AUDIO PLAYER] button, the display will show the first three characters of the file name of the currently selected audio file.

Continue holding down the [AUDIO PLAYER] button, and press the [INC/+] button to jump to the next song, or press the [DEC/-] button to jump to the beginning of the song (or the preceding song if you're already at the beginning of the song).

### MEMO

The songs will be ordered by their file name (in the order of numerals, uppercase letters, and lowercase letters).

### 4. Play or stop the song.

When you press the [ \[ \] button, the button that was blinking will light, and the selected audio file will play.

If you press the [ \[ \] button during playback, the lit button will blink, and playback will stop.

If you press the [►/II] button once again, playback will resume from where it was stopped.

# Switching songs during playback

During playback, you can hold down the [AUDIO PLAYER] button and press the [DEC/–] button to interrupt playback and return to the beginning of the current song. Similarly, pressing the [INC/+] button will move to the beginning of the next song, and resume playback.

### MEMO

If you hold down the [AUDIO PLAYER] button and press the [DEC/–] button at the beginning of the song, you'll return to the beginning of the preceding song.

# **Making Audio Player Settings**

- Hold down the [SHIFT] button and press the [AUDIO PLAYER] button; the current audio player setting will blink in the display.
- Continue holding down the [SHIFT] button, and press the [AUDIO PLAYER] button once again to switch parameters.

After a brief interval, the value will appear; continue holding down the [SHIFT] button, and use the [INC/+] / [DEC/-] buttons to edit the value.

	Parameter	Value	Explanation
	LuL	0–127	Audio file playback volume level
	PLY	P (SINGLE PLAY),	Choose whether playback will stop at the end of the selected song (SINGLE PLAY) or continue playing to the next song (CHAIN PLAY).
-			

**3.** To save this setting, hold down the [SHIFT] button and press the [WRITE] button.

# **Editing the Tone Settings**

# **Editing the Tone Parameters**

You can edit tone parameters such as the volume and reverb for a regular tone, and save your settings in a FAVORITE memory location (p. 10).

- \* You can't edit the tone parameters of a special tone.
- Select the regular tone whose tone parameters you want to edit (p. 9).
- Hold down the [SHIFT] button and press the TONE button of the tone you selected in step 1 (i.e., the TONE button that's lit).

The parameter name (P5H) will blink in the display, and then its value (aFF or  $a\Pi$ ) will appear.

Continue holding down the [SHIFT] button, and press the same TONE button to switch parameters.

The parameters will switch from top to bottom of the "Parameter" column in the following table.

 Don't release your finger from the [SHIFT] button while making this setting.

Parameter	Value	Explanation
		Portamento Switch
PSB	OFF, ON	Portamento is an effect that creates a smooth change in pitch from one note to the next.
		Portamento Time
PEN	0–127	This specifies the time over which the pitch will change when using portamento. Higher values will lengthen the time over which the pitch will reach the next note.
,	0.127	Volume
nor	0–127	This specifies the volume of the tone.
		Reverb
rEu	0–127	This effect adds the reverberation that is characteristic of a performance in a large hall. Higher values produce deeper reverberation.
		Release Time (*1)
rEL	-64-63	This adjusts the time from note-off (i.e., when you release the key) until the sound disappears. Higher values produce a longer release time.
		Attack Time (*1)
NF E	-64–63	This adjusts the sharpness (speed) at which the sound begins. Higher values produce a more gentle attack.
		Cutoff (*1)
CUF	-64-63	Increasing the cutoff value will make the sound harder (brighter); decreasing it will make the sound more mellow (darker). Use this parameter to make adjustments if the sound is too muffled or too bright.
		Resonance (*1)
rE5	-64-63	Increasing the resonance value will produce a distinctive tonal character that is typical of a synthesizer. If you want to emphasize the effect of resonance, it's a good idea to slightly lower the cutoff.

- \*1 The values you specify here are an adjustment relative to the value assigned by each tone. If this value is set to 0, the parameter will be as specified by the tone's own settings.
- When the parameter value appears, continue holding down the [SHIFT] button and use the [INC/+] / [DEC/-] buttons to edit the value.

### MEMO

- You can make the value change more quickly by holding down the [INC/+] / [DEC/-] button. If you want the value to change even faster, hold down the button and press the other button as well.
- Even while editing the value, you can play the keyboard to hear the result.
- Release the [SHIFT] button.
  - \* If you select a different sound or turn off the Lucina AX-09's power in this state, the changes you made will be lost. If you want to keep your changes, you must store them in a FAVORITE memory location as follows.
- 6. Press the [WRITE] button.

The [WRITE] button will blink.

- 7. Press the FAVORITE [A] button or [B] button to select a bank.
- Press one of the TONE [1]-[6] buttons to select the memory location in which you'll store the settings.

When the [WRITE] button goes out, the settings have been stored.

# Adjusting the Tuning

# **Master Tune**

This is the overall tuning setting for the entire Lucina AX-09. With the factory settings, this is set to 440 Hz. The displayed value is the frequency of the A4 key (middle "A").

**Value** 415.3–466.2 Hz

 Hold down the [SHIFT] button and press the [TRANSPOSE] button.

The display will indicate "Than," and then the current value of Master Tune will blink.

The display shows only the last three digits (the initial numeral of "4" is omitted).

2. Continue holding down the [SHIFT] button, and use the [INC/+] / [DEC/–] buttons to adjust the tuning value.

### MEMO

- You can make the value change more quickly by holding down the [INC/+] / [DEC/-] button. If you want the value to change even faster, hold down the button and press the other button as well.
- Even while editing the value, you can play the keyboard to hear the result.
- 3. Release the [SHIFT] button.
- To save this setting, hold down the [SHIFT] button and press the [WRITE] button.

# **Key Scale Tune**

You can choose either equal temperament or an Arabian scale as the keyboard tuning.

Value	Explanation
E9L	Equal temperament
ЯгЬ	Arabian scale

 Hold down the [SHIFT] button and press the [TRANSPOSE] button twice.

The display will indicate " $\forall E \ \exists$ "; then the current setting of Key Scale Tune will blink.

 Continue holding down the [SHIFT] button, and use the [INC/+] / [DEC/-] buttons to choose the desired value for Key Scale Tune.

#### MEMO

Even while editing the value, you can play the keyboard to hear the result.

- Release the [SHIFT] button.
- To save this setting, hold down the [SHIFT] button and press the [WRITE] button.

# Adjusting the Keyboard's Touch Sensitivity

# Setting a Fixed Value for the Keyboard's Velocity

In order to play using notes that all have a uniform level (velocity), regardless of the amount of force you use when pressing keys, carry out the following procedure.

 Hold down the [SHIFT] button and press the [V-LINK] button once.

The display will indicate " ${}_{\text{\tiny L}}$  E L ," and then the value of the current setting will appear.

 Continue holding down the [SHIFT] button, and use the [INC/+] / [DEC/-] buttons to change the setting.

Value	Explanation
r RL (Real)	Notes reflecting the actual amount of force you use when pressing keys will be output.
1–127	Notes having the specified velocity value will be output, regardless of the amount of force you use when pressing keys.

- 3. Release the [SHIFT] button.
- **4.** To save this setting, hold down the [SHIFT] button and press the [WRITE] button.

# Count In / Metronome

"Count in" refers to a feature that counts you in to the beginning of the performance. To have a two-measure count in be sounded, press the modulation bar while you press the [PREVIEW] button.

Note that, if you wish, you can have a metronome be sounded instead—simply change the Count Mode to  $\Pi$  by (METRONOME) using the setting below. The metronome will continue to sound until you press the [PREVIEW] button a second time.

\* A count in will not be sounded when the [AUDIO PLAYER] button is lighted.

# **Count In Settings**

- Hold down the [SHIFT] button and press the [PREVIEW] button; the current count in setting will blink in the display.
- Continue holding down the [SHIFT] button, and press the [PREVIEW] button once again to switch parameters.

After a brief interval, the value will appear; continue holding down the [SHIFT] button, and use the [INC/+] / [DEC/-] buttons to edit the value.

Parameter	Value	Explanation
	off (OFF),	Count mode
Ent	[, n (COUNTIN),	Determines whether count in
	∏Er (METRONOME)	or metronome will sound
ьРП	20-250	Tempo of count
PWF	0.4, 2.4, 3.4, 4.4, 5.4, 6.4, 7.4	Time signature of count (2.4 indicates 2/4 time)
LuL	0–10	Volume of count
	1 (Electronic metronome)	
	2 (Mechanical metronome)	
£ 42	3 (Pulse)	Sound used for count
בסר	4 (Beep)	Journa used for Count
	5 (Cowbell)	
	6 (Stick)	

3. To save this setting, hold down the [SHIFT] button and press the [WRITE] button.

### MEMO

To have the tempo of the count be shown in the display, hold down the [PREVIEW] button. While in this state, you can set a new tempo by tapping the [SHIFT] button at least four times at the desired tempo; or you can set it using the [INC/+] and [DEC/-] buttons.

# Various Settings (Utility)

# Checking the Lucina AX-09's Version

Here's how to check the Lucina AX-09's version.

 While holding down the FAVORITE [A], [B], and [WRITE] buttons simultaneously, turn on the Lucina AX-09's power.

The display will indicate " $\coprod$   $\vdash$   $\bot$  "; the Lucina AX-09 will be in Utility mode.

2. Press the TONE [1] button.

The display will indicate the version of your Lucina AX-09.

If you want to continue playing the Lucina AX-09, turn off the power and wait several seconds before turning it on again.

# **USB Driver Settings**

When using a USB cable to connect the Lucina AX-09 to your computer, you can choose whether to use the standard USB driver that's provided by your computer or the USB driver provided by Roland.



#### MEMO

For details on connecting the Lucina AX-09 to your computer via USB, refer to "Connecting to Your Computer via USB" (p. 21).

 While holding down the FAVORITE [A], [B], and [WRITE] buttons simultaneously, turn on the Lucina AX-09's power.

The display will indicate "LLL"; the Lucina AX-09 will be in Utility mode.

2. Press the TONE [2] button.

The display will indicate " $d \cap u$ "; then the current value is shown and the [WRITE] button will blink.

 Use the [INC/+] / [DEC/-] buttons to choose the desired setting.

Value	Explanation	
□E∩ (Generic)	Choose this if you're using the standard USB driver provided by your computer.	
(Default)	Normally you'll use this mode.	
⊔೧ದ (Vendor)	Choose this if you're using the USB driver downloaded from the Roland website.	

- 4. Press the [WRITE] button to save the setting.
- 5. Turn the Lucina AX-09's power off, then on again.

Now you'll be able to use the USB driver you choose.

# Backing Up Lucina AX-09 Settings to USB Memory

Here's how to back up your Lucina AX-09 settings and the tone settings in FAVORITE memory (p. 16) to USB memory (sold separately).



- Insert your USB memory into the USB MEMORY slot (p. 15).
- While holding down the FAVORITE [A], [B], and [WRITE] buttons simultaneously, turn on the Lucina AX-09's power.

The display will indicate "L'E L"; the Lucina AX-09 will be in Utility mode.

3. Press TONE [3] button.

The display will indicate "b $\Box P$ " and the [WRITE] button will blink.

4. Press the [WRITE] button.

The backup will begin.

 When the display indicates "dn E," turn the Lucina AX-09's power off, then on again.

### (MEMO)

If USB memory is not inserted in the Lucina AX-09 when you press the [WRITE] button, the display will indicate
"F c c"

# Restoring Lucina AX-09 Settings from USB Memory

Here's how settings you saved as described in "Backing Up Lucina AX-09 Settings to USB Memory" (p. 19) can be restored to the Lucina AX-09.



- Insert the USB memory containing the backed up settings into the USB MEMORY slot (p. 15).
- While holding down the FAVORITE [A], [B], and [WRITE] buttons, turn on the Lucina AX-09's power.

The display will indicate " $\mbox{\it LL}$ "; the Lucina AX-09 will be in Utility mode.

3. Press the TONE [4] button.

The display will indicate "r 5 E" and the [WRITE] button will blink.

4. Press the [WRITE] button.

The [WRITE] button will light, and the restore operation will begin.

5. When the display indicates "dnE," turn the Lucina AX-09's power off, then on again.

#### MEMO

If USB memory is not inserted in the Lucina AX-09 when you press the [WRITE] button, or if backup data does not exist in the appropriate location of the USB memory, the display will indicate "Err."

# Restoring the Factory Settings (Factory Reset)

Here's how to return the Lucina AX-09 to its factory-set state.

### NOTE

- When you execute this operation, all settings you've modified since purchasing the Lucina AX-09, including the tone settings you've stored in FAVORITES, will be lost.
- If you want to keep your settings, be sure to back them up to USB memory before you execute the factory reset.

"Backing Up Lucina AX-09 Settings to USB Memory" (p. 19)

 While holding down the FAVORITE [A], [B], and [WRITE] buttons, turn on the Lucina AX-09's power.

The display will indicate "나는 L"; the Lucina AX-09 will be in Utility mode.

2. Press the TONE [5] button.

The display will indicate " $F \ \Box \ L$ ", and the [WRITE] button will blink.

3. Press the [WRITE] button.

The [WRITE] button will light, and the factory reset will begin.

### NOTE

While the [WRITE] button is lit, the factory reset is being executed. Never turn off the power during this time. The Lucina AX-09 may malfunction if you do so.

4. When the display indicates "d n Ε," turn the Lucina AX-09's power off, then on again.

# **Connecting Other Equipment**

# **Controlling MIDI Devices**

If you're using the Lucina AX-09 by itself, there's no need for you to have a detailed understanding of MIDI. The following explanation of MIDI is provided for those who wish to connect the Lucina AX-09 to other MIDI devices and control them.

### MEMO

MIDI stands for Musical Instrument Digital Interface, and is a global standard that allows electronic musical instruments and computers to exchange performance data.

"MIDI Implementation Chart" (p. 26) is a chart that provides an easy way of checking which MIDI messages the Lucina AX-09 is able to receive. By comparing the MIDI implementation charts of the Lucina AX-09 and some other MIDI device, you can see which messages are compatible between the two devices.

# MIDI Messages that can be Transmitted and Received

The Lucina AX-09 can transmit and receive the following MIDI messages.

### MEMO

The Lucina AX-09 always receives MIDI messages from the USB COMPUTER connector.

MIDI message	Explanation	
Note On/Off (*1)	Transmission	Key on/off messages
Velocity	Transmission	Strength with which you play the key
Aftertouch	Transmission	Channel aftertouch messages transmitted by the D Beam [ASSIGNABLE] button assigned to "月FL" or by the PEDAL. (This message is not transmitted by the keyboard.)
	Receive	Channel aftertouch, polyphonic aftertouch.
	Receive	Cannot be specified from the Lucina AX-09
Program Change	Transmission	
Bank Select (*2)	Transmission	Cannot be specified from the Lucina AX-09
Modulation CC01, transmission: MODULATION BAR		sion: MODULATION BAR
CC01 (Modulation)		
CC05 (Porta-Time)		
CC07 (Volume)		
CC10 (Panpot)		
CC11 (Expression)		
CC64 (Hold)	· Transmission	Control change number assigned to the D Beam [ASSIGNABLE] button or to
CC65 (Porta-Sw)	iransinission	the PEDAL
CC66 (Sostenute)		
CC71 (Resonance)		
CC72 (ReleaseTime)		
CC73 (AttackTime)		
CC74 (Cutoff)		

- \*1 Local control is always on. It cannot be turned off. If you want to control a connected external sound module without playing the Lucina AX-09's own sounds, you can either disconnect the Lucina AX-09's OUTPUT jacks, lower the Lucina AX-09's volume, or lower the volume of the connected amp or mixer.
- \*2 The transmitted program change number and bank select data (CC00, CC32) cannot be specified from the Lucina AX-09, but when you select an internal tone, that tone's program change number and bank select data (CC00, CC32; see the "Tone List" at the end of this manual) will be transmitted according to the MIDI settings (p. 20).

# Connecting a MIDI Sound Module

 Use a MIDI cable to connect the Lucina AX-09's MIDI OUT connector to the MIDI IN connector of the MIDI sound module you want to control.



As necessary, connect an amp or speakers to the MIDI sound module or synthesizer you're using. For details, refer to the owner's manual of the sound module (or other device) you're using.

# Making MIDI-related Settings

- 1. Hold down the [SHIFT] button and press the [V-LINK] button the appropriate number of times to access the desired MIDI setting; four times for "Eh," five times for "BoE," or six times for "PE."
- Continue holding down the [SHIFT] button, and use the [INC/+] / [DEC/-] buttons to edit the setting.

Parameter	Value	Explanation
Εh	1–16 (Default: 1)	MIDI channel setting
PuZ	OFF, ON (Default: OFF)	Specifies whether MSB/LSB will be transmitted
PE	OFF, ON (Default: ON)	Specifies whether program change data will be transmitted

- Release the [SHIFT] button.
- **4.** To save this setting, hold down the [SHIFT] button and press the [WRITE] button.

# Connecting to Your Computer via USB

If you use a commercially available USB cable to connect the Lucina AX-09's rear panel USB COMPUTER connector to a USB connector of your computer, you'll be able to do the following things using MIDI.

- Play your software synthesizers by performing the Lucina AX-09.
- Record into your sequencer software by performing the Lucina AX-09.
- Use your sequencer software to play the Lucina AX-09.



 For details on operating requirements, refer to the Roland website.

### Roland website

Here you can download the original driver, and view installation instructions and operating requirements.

http://www.roland.com/

#### NOTE

- Only MIDI data can be transmitted or received via USB.
- Power-on the Lucina AX-09 before starting the MIDI application on your computer. Do not turn the Lucina AX-09's power on or off while your MIDI application is running.

# **USB** driver settings

Normally it will not be necessary to install a USB driver in your computer. However if you experience problems with the computer connection (if a malfunction occurs, or if the performance is poor), you may be able to solve the problem by downloading and installing Roland's original driver as described below.

- 1. As described in "USB Driver Settings" (p. 18), change the driver setting to "und" (Vendor).
- Turn the Lucina AX-09's power off, and then on again.
- 3. Download and install the original Roland driver.

For details on downloading and installing the original Roland driver, refer to the Roland website.

# **Controlling Video (V-LINK)**

V-LINK (**V-LINK**) is a function that allows music and images to be performed together. By using MIDI to connect two or more V-LINK compatible devices, you can easily enjoy performing a wide range of visual effects that are linked to the expressive elements of a music performance.

For example, if you use the Lucina AX-09 in conjunction with the EDIROL P-10, you'll be able to do the following.

- You can use the Lucina AX-09's keyboard to switch images on the P-10.
- You can use the Lucina AX-09's touch controller to control the speed of image playback.

This example shows the Lucina AX-09 connected to an EDIROL P-10.

Use a MIDI cable to connect the Lucina AX-09's MIDI OUT connector to the EDIROL P-10's MIDI IN connector.



\* You can't perform V-LINK communication via USB.

# Turning V-LINK On

1. Press the [V-LINK] button to make it light.

# Operations on the Lucina AX-09

V-LINK data is transmitted on MIDI channel 15. The following functions can be controlled from the Lucina AX-09.

Controller	Explanation	
	Switch images.	
Keyboard (the far-left octave)	* Normally, the keyboard will sound at the same time that the clip is switched. If you don't want the keyboard to sound, change the Local Switch setting to "OFF."	
Touch Controller	Control the playback speed.  * However, the touch controller will also transmit	
	pitch bend data at the same time.	

# Local switch settings

 Hold down the [SHIFT] button and press the [V-LINK] button seven times.

The display will indicate "L C L ," and then the value of the current setting will appear.

 Continue holding down the [SHIFT] button, and use the [INC/+] / [DEC/-] buttons to change the setting.

Value	Explanation
٥٥	When V-LINK is on, the leftmost octave of the keyboard will sound.
oFF	When V-LINK is on, the leftmost octave of the keyboard will not sound.

\* This setting is not saved. It will always be ON when the Lucina AX-09 starts up.

# Troubleshooting

Problem	Items to check	Action	
	Are the included AC adaptor and power cord correctly connected to an AC outlet and to the Lucina AX-09?	Do not use any AC adaptor or power cord other than those supplied with the Lucina AX-09. Doing so may cause malfunctions (p. 7).	
Power won't turn on	Could the batteries have run low?	Check the remaining battery power (p. 6).	
	Are the batteries inserted in the correct orientation?	Open the battery compartment, and verify that the batteries are oriented correctly (p. 6).	
Three dots are blinking in the display	Battery power has run low.	Replace the batteries as soon as possible (p. 6).	
Three dots are lit in the display	The batteries have run down completely.	Install fresh batteries (p. 6).	
	Is the connected amp or speaker turned on?	Turn on the power of the connected amp or speaker.	
	Could the volume of the connected equipment be lowered?	Adjust the volume of the connected equipment.	
	Could the [VOLUME] knob be set to the minimum level?	Adjust the [VOLUME] knob.	
	Are the connections correct?	Make the correct connections (p. 8).	
No sound	Do you hear sound when you connect headphones?	If you hear sound in the headphones, it may be that the connection cable is broken, or that your amp or mixer has malfunctioned. Check your connection cable and equipment once again.	
	Could the volume have been lowered by pedal operations, D Beam controller operations, or by MIDI messages (volume messages or expression messages) received from an external MIDI device?	Press the pedal, move your hand above the D Beam controller, or check the controller settings.	
	Could you have selected a FAVORITE memory location whose volume level is set to "0"?	Increase the volume level (p. 16).	
	Could you be using a connection cable that has a built-in resistor?	Use a connection cable that does not have a built-in resistor (such as one from the Roland PCS series).	
No sound from an external MIDI device	Does the Lucina AX-09's MIDI transmit channel match the connected device's MIDI receive channel?	Set the Lucina AX-09's transmit channel to match the connected device's receive channel (p. 20).	
The volume level of the instrument connected to EXT IN jack is too low	Could you be using a connection cable that contains a resistor?	Use a connection cable that does not contain a resistor.	
	For some tones, pitches in a certain range may sound diff	ferent than the pitch of other tones.	
Something is wrong with the pitch	It may be that the pitch was changed when you touched the touch controller, or when pitch bend messages were received from an external MIDI device.		
	Could the Lucina AX-09's tuning be set inappropriately?	Check the master tune setting and the key scale tune setting (p. 17).	
	Audio files of a sample rate other than 44.1 kHz cannot be played by the Lucina AX-09.	Please use audio files whose sample rate is 44.1 kHz.	
Can't play back audio files from USB memory	It may be that the audio file is of a file type that cannot be played by the Lucina AX-09.	Use an audio file of a type listed in "Audio files that can be played" (p. 15).	
	It may be that the audio file is damaged.	Check the audio file.	
	Check the format of the USB memory. The Lucina AX-09 can use USB memory that is formatted as FAT. (Normally, USB memory you purchase will be formatted as FAT, and can be used without reformatting.) USB memory that was formatted by a computer with a file system other than FAT (for example, as NTFS) will not be recognized by the Lucina AX-09.	Use your computer to format the USB memory as FAT. (The Lucina AX-09 is not able to format USB memory.)	
USB memory is not recognized/ Files are not shown		In Computer (or My Computer), right-click the USB drive, choose "Format," and choose "FAT" as the file system to format the drive as FAT. For more about how to format USB memory, refer to your computer's owner's manual.	
	Could the USB memory be write protected?	Turn off the write-protect setting.	
Can't back up to USB memory	Is there sufficient free space on the USB memory?	Use USB memory that has sufficient free space.	
can coack up to oob memory	Check the format of the USB memory. The Lucina AX-09 can use USB memory that is formatted as FAT.	(Refer to the item "USB memory is not recognized/ Files are not shown.")	

# Specifications

Lucina AX-09: Synthesizer

Keyboard	37 Keys (with velocity)		
Sound Generator Section			
Maximum Polyphony	128 Voices	128 Voices	
Parts	1 Part		
Tones	150 Tones (Regular Ton	es 144, Special Tones: 6)	
Audio Player Section (p	layable formats)		
	Format	MPEG-1 audio layer 3	
	Sampling Frequency	44.1 kHz	
MP3	Bit Rate	32/40/48/56/64/80/96/112/128/ 160/192/224/256/320 kbps, VBR (Variable Bit Rate)	
WAV, AIFF	Sampling Frequency	44.1 kHz	
WAV, AIFF	Bit Depth	8/16/24 -bit	
Others	Others		
Controllers	D Beam Controller Modulation Bar Touch Controller		
Connectors	OUTPUT Jacks (L (MONO), R) (1/4 inch phone type) PHONES Jack (Stereo 1/4 inch phone type) EXT IN Jack (Stereo mini type) FOOT PEDAL Jack (Assignable) USB COMPUTER Connector (for USB MIDI) USB MEMORY Slot MIDI OUT Connector (V-LINK) DC IN Jack		
Display	7 segments, 3 characters (LED)		

Power Supply	AC Adaptor Ni-MH AA SIZE Rechargeable Battery x 8 * Batteries sold separately. * Do not use alkaline batteries or zinc-carbon batteries.	
Current Draw	600 mA	
Battery Life for Continuous Use	Ni-MH Rechargeable batteries: approximately 4 hours (This figure will vary depending on the actual conditions of use.)	
Dimensions	832 (W) x 245 (D) x 95 (H) mm 32-13/16 (W) x 9-11/16 (D) x 3-3/4 (H) inches	
Weight	3.7 kg 8 lbs 3 oz (Excluding AC Adaptor)	
Accessories	Owner's Manual, Quick Guide Tutorial DVD Strap Panel Sticker USB MEMORY Connector Cap AC adaptor (PSB-1U (S))	
Options	Pedal Switch: DP Series Expression Pedal: EV-5 USB Memory * Use USB memory sold by Roland. We cannot guarantee operation if other products are used.	

<sup>\*</sup> In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

# **Error Message List**

Message		Description
LoE	Lock	USB memory is locked. Unlock the USB memory before using it.
ЕПР	Empty	The USB memory does not contain the necessary data.
Err	Error	Can't access USB memory. Make sure that the USB memory is inserted.
FUL	Memory Full	Processing could not be carried out because there is insufficient free space on the USB memory.

# **USING THE UNIT SAFELY**

#### INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

#### About A WARNING and A CAUTION Notices

Used for instructions intended to alert the user to the risk of death or severe injury **MWARNING** should the unit be used improperly.

> Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly.

Material damage refers to damage or **⚠** CAUTION other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets

About the Symbols

The  $\triangle$  symbol alerts the user to important instructions or warnings.The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.

The  $\bigcirc$  symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.

The symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

#### ------ ALWAYS OBSERVE THE FOLLOWING

## WARNING

Do not open (or modify in any way) the unit or its AC adaptor



Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.



Never install the unit in any of the following

- · Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
- · Damp (e.g., baths, washrooms, on wet floors); or are
- · Exposed to steam or smoke; or are
- · Subject to salt exposure; or are Humid; or are
- Exposed to rain; or are
- · Dusty or sandy; or are
- · Subject to high levels of vibration and shakiness.

If you're using the Lucina AX-09 without a shoulder strap, make sure you always place it so it's level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces



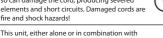
Be sure to use only the AC adaptor supplied with the unit. Also, make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock.



Use only the attached power-supply cord. Also the supplied power cord must not be used with any other device



Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!



an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit, and consult an audiologist



Do not allow any objects (e.g., flammable mate rial, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit



# WARNING

Immediately turn the power off, remove the AC adaptor from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when

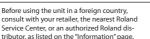
- The AC adaptor, the power-supply cord, or the plug has been damaged; or
- · If smoke or unusual odor occurs
- Objects have fallen into, or liquid has been spilled onto the unit; or
- The unit has been exposed to rain (or otherwise has become wet); or
- The unit does not appear to operate normally or exhibits a marked change in

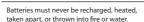
In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.



Protect the unit from strong impact. (Do not drop it!)

Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.







Never expose Battery to excessive heat such as sunshine, fire or the like.



## CAUTION

The unit and the AC adaptor should be located so their location or position does not interfere with their proper ventilation



Always grasp only the plug on the AC adaptor cord when plugging into, or unplugging from,



At regular intervals, you should unplug the AC adaptor and clean it by using a dry cloth to wipe all dust and other accumulations away from its prongs. Also, disconnect the power plug from the power outlet whenever the unit is to remain unused for an extended period of time. Any accumulation of dust between the power plug and the power outlet can result in poor insulation and lead to fire.



## !\ CAUTION

Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children.



Never climb on top of, nor place heavy objects



Never handle the AC adaptor or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit Before moving the unit, disconnect the AC



adaptor and all cords coming from external Before cleaning the unit, turn off the power and



unplug the AC adaptor from the outlet (p. 7). Whenever you suspect the possibility of lightning in your area, disconnect the AC adaptor from the outlet.



If used improperly, batteries may explode or leak and cause damage or injury. In the interest of safety, please read and observe the following precautions (p. 6).

- · Carefully follow the installation instructions for batteries, and make sure you observe the correct polarity.
- · Avoid using new batteries together with used ones. In addition, avoid mixing different
- types of batteries. Remove the batteries whenever the unit is to remain unused for an extended period



- of time. · If a battery has leaked, use a soft piece of cloth or paper towel to wipe all remnants of the discharge from the battery compartment. Then install new batteries. To avoid inflammation of the skin, make sure that none of the battery discharge
- gets onto your hands or skin. Exercise the utmost caution so that none of the discharge gets near your eyes. Immediately rinse the affected area with running water if any of the discharge has entered the eyes.
- Never keep batteries together with metallic objects such as ballpoint pens, necklaces, hairpins, etc.

Used batteries must be disposed of in compliance with whatever regulations for their safe disposal that may be observed in the region in which you live.



Keep the USB MEMORY connector cap you may remove and the included USB MEMORY connector cap in a safe place out of children's reach, so there is no chance of them being swallowed accidentally







# **IMPORTANT NOTES**

## **Power Supply: Use of Batteries**

- Do not connect this unit to same electrical outlet that is being used by an electrical appliance that is controlled by an inverter (such as a refrigerator, washing machine microwave oven, or air conditioner), or that contains a motor. Depending on the way in which the electrical appliance is used, power supply noise may cause this unit to malfunction or may produce audible noise. If it is not practical to use a separate electrical outlet, connect a power supply noise filter between this unit and the electrical outlet.
- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause
- The use of an AC adaptor is recommended as the unit's power consumption is relatively high. Should you prefer to use batteries, please use the nickel hydrogen type.
- · When installing or replacing batteries, always turn off the power on this unit and disconnect any other devices you may have connected. This way, you can prevent malfunction and/or damage to speakers or other devices
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices
- · If batteries are installed, disconnecting or reconnecting the power cord at the AC outlet or disconnecting the DC plug from the Lucina AX-09's rear panel while the power is on will cause the power to turn off. You must turn off the power before you connect or disconnect the power cord or AC adaptor

## **Placement**

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference
- · This device may interfere with radio and television reception. Do not use this device in the vicinity of such
- · Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit
- · When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.
- Do not allow objects to remain on top of the keyboard. This can be the cause of malfunction, such as keys ceasing to produce sound.
- Depending on the material and temperature of the surface on which you place the unit, its rubber feet may discolor or mar the surface.
- You can place a piece of felt or cloth under the rubber feet to prevent this from happening. If you do so, please make sure that the unit will not slip or move accidentally.

### Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation

### **Repairs and Data**

Please be aware that all data contained in the unit's memory may be lost when the unit is sent for repairs Important data should always be backed up the USB memory, or written down on paper (when possible). During repairs, due care is taken to avoid the loss of data However, in certain cases (such as when circuitry related to memory itself is out of order), we regret that it may not be possible to restore the data, and Roland assumes no liability concerning such loss of data.

## **Using USB Memories**

- Carefully insert the USB memory all the way in-until it is firmly in place.
- Never touch the terminals of the USB memory. Also, avoid getting the terminals dirty
- USB memories are constructed using precision components; handle the cards carefully, paying particular note to the following.
  - To prevent damage to the cards from static electricity, be sure to discharge any static electricity from your own body before handling the cards
  - Do not touch or allow metal to come into contact with the contact portion of the cards
  - · Do not bend, drop, or subject cards to strong shock or vibration
  - Do not keep cards in direct sunlight, in closed vehicles, or other such locations
  - · Do not allow cards to become wet
  - Do not disassemble or modify the cards.

## Handling DVDs

 Avoid touching or scratching the shiny underside (encoded surface) of the disc. Damaged or dirty DVD discs may not be read properly. Keep your discs clean using a commercially available disk cleaner.

# Strap Holder Precautions

- Never unscrew the strap pins to avoid damaging the Lucina AX-09's plastic housing, which eventually compromises overall stability and safety.
- To avoid dropping the unit and damaging it or causing injuries to yourself or other people, be sure to double check whether the supplied strap is securely attached to the two pins before using the Lucina AX-09
- Roland recommends installing commercially available strap locks for guitar to guard against damage and injuries caused by the strap coming loose while your are plaving.

### Additional Precautions

- Please be aware that the contents of memory can be irretrievably lost as a result of a malfunction, or the improper operation of the unit. To protect yourself against the risk of loosing important data, we recommend that you periodically save a backup copy of important data you have stored in the USB memory.
- Unfortunately, it may be impossible to restore the contents of data that was stored on a USB memory or the internal memory once it has been lost. Roland Corporation assumes no liability concerning such loss of data.
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- · Never strike or apply strong pressure to the display.
- When connecting / disconnecting all cables, grasp the connector itself-never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).

- · When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging
- Use only the specified expression pedal (EV-5; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.
- Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable
- The usable range of D Beam controller will become extremely small when used under strong direct sunlight. Please be aware of this when using the D Beam controller
- · The explanations in this manual include illustrations that depict what should typically be shown by the display. Note, however, that your unit may incorporate a newer, enhanced version of the system (e.g., includes newer sounds), so what you actually see in the display may not always match what appears in the manual.

- · Microsoft and Windows are registered trademarks of Microsoft Corporation.
- Windows® is known officially as: "Microsoft® Windows® operating system."
- MMP (Moore Microprocessor Portfolio) refers to a patent portfolio concerned with microprocessor architecture. which was developed by Technology Properties Limited (TPL). Roland has licensed this technology from the TPL
- MPEG Laver-3 audio compression technology is licensed from Fraunhofer IIS Corporation and THOMSON
- MatrixQuest<sup>™</sup> 2010 TEPCO UQUEST, LTD. AII riahts reserved. The Lucina AX-09's USB functionality uses MatrixQuest middleware technology from TEPCO UQUEST, LTD.



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# Index

A
AC ADAPTOR 7 ADLIB 13 AFTERTOUCH 13,14 AIFF 15 ARABIAN SCALE 17 ASSIGNABLE 12 ATTACK TIME 13,14,16 AUDIO FILE 14 AUDIO PLAYER 15 [AUDIO PLAYER] BUTTON 15
В
BACKING UP.         19           BATTERIES.         6           BATTERY COMPARTMENT.         6
C
COMPUTER         21           CORD HOOK         7           COUNT IN         18           CUTOFF         13, 14, 16
CORD HOOK
CORD HOOK. 7 COUNT IN 18 CUTOFF 13, 14, 16
CORD HOOK

F
FACTORY RESET       19         FAVORITE       10         FAVORITE [A] / [B] BUTTON       10         FILTER       12         FOOT PEDAL       13, 14         FOOT PEDAL JACK       13
Н
HEADPHONES
I
[INC/+] / [DEC/-] BUTTONS 9
K
KEY SCALE TUNE 17
L
LETTERS         2           L/MONO JACK         8           [LOCK] BUTTON         14           LOCK FUNCTION         14
M
MASTER TUNE         17           METRONOME         18           MIDI         20           MIDI IMPLEMENTATION CHART         26           MODULATION         12,13           MODULATION BAR         11           MP3         15

N	
NI-MH AA RECHARGEABLE BATTERIES	6
0	
OCTAVE [+] / [-] BUTTON 1 OUTPUT JACKS	
P	
PAN 12, 1 PEDAL DOWN 1 PEDAL SWITCH 1 PEDAL UP 1 PHONES JACK PITCH 1 PORTABLE AUDIO PLAYER 1 PORTAMENTO 12, 13, 1 PORTAMENTO 12, 13, 1 PORTAMENTO 112, 13, 1 POWERS SWITCH PREVIEW [PREVIEW]	4 3 4 8 2 4 6 6 8 9
R	
REGISTERING A TONE.       1         REGULAR TONE.       13, 14, 1         RELEASE TIME       13, 14, 1         RESET       1         RESONANCE.       13, 14, 1         RESTORING.       1         REVERB.       1	9 6 9
S	
SECURITY SLOT	3

SPEAKERS         8           SPECIAL TONE         9           [SPECIAL TONE] BUTTON         9           SPECIFICATIONS         23           STRAP         7           STRAP PIN         7
T
TONE.         9           TONE [1]-[6] BUTTONS         9           TONE PARAMETERS.         16           TONE SETTINGS         16           TOUCH CONTROLLER.         11           [TRANSPOSE] BUTTON         11           TROUBLESHOOTING.         22           TUNING         17
U
USB COMPUTER CONNECTOR
V
VERSION         18           V-LINK.         21           VOLUME.         12, 13, 16           [VOLUME] KNOB.         8
W
WAV

# MIDI Implementation Chart

Synthesizer Lucina AX-09				Date : Jan. 1, 2010 Version : 1.00
	Function	Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1–16 1–16	1–16 1–16	Memorized
Mode	Default Message Altered	Mode 3 Mono, Poly *******	Mode 3 Mode 3, 4 (M=1) X	*2
Note Number	True Voice	7–126 ********	0–127 0–127	
Velocity	Note ON Note OFF	0	0	
After Touch Pitch Bend	Key's Ch's	X O O	0 0	
Control Change	0, 32 1 5 6, 38 7 10 11 64 65 66 71 72 73 74 4 75 84 91	0 *1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 X X X X		Bank Select Modulation Portamento Time Data entry Volume Panpot Expression Hold 1 Portamento SW Sostenuto Resonance Release Time Attack Time Cutoff Sound Control Portamento Control Effect 1 Depth Effect 3 Depth RPN LSB, MSB
Program Change	True #	O *1	O 0–127	Program No. 1–128
System Exclusion	ve	X	X	
System Common	Song Position Pointer Song Sel Tune	X X X	X X X	
System Real Time	Clock Commands	X X	X	
Aux Messages	All Sounds Off Reset All Controllers Local On/Off All Notes Off Active Sensing Reset	X X X X O X	O O X O (123–127) X	
Notes		*1 O X is selectable *2 Recognized as M=1 even if M≠	1	

# **DECLARATION OF CONFORMITY Compliance Information Statement**

Model Name: AX-09
Type of Equipment: Synthesizer

Responsible Party: Roland Corporation U.S.

Address: 5100 S. Eastern Avenue, Los Angeles, CA 90040-2938

Telephone: (323) 890-3700

For EU Countries



This product complies with the requirements of EMC Directive 2004/108/EC.

For the USA

# FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.

This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

### NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

### **AVIS**

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

For C.A. US (Proposition 65)

### **WARNING**

This product contains chemicals known to cause cancer, birth defects and other reproductive harm, including lead.